

1-800-943-0003



**Wisconsin's
24-Hour Spill
Emergency
Hotline**



Spill Response Plans & General Reminders

2015 CAFO Meetings

Casey Jones / Mark Cain – DNR Agricultural
Specialist

Presentation Overview

- **Why does every farm need a spill response plan?**
 - Land application spills or runoff
 - Production site spills
- **General spill response plan content**
- **Plan improvements/recommendations**
- **CAFO Permit requirements for spill response plans, reporting, clean-up & post-spill remediation**
- **DNR staff roles in manure spills (spills, ag runoff, wardens)**

Why Does Every Farm Need One?

- Be Prepared
 - Train staff
 - Have resources available
- Reduce water quality impacts
 - Groundwater
 - Surface waters
- Economic sense
 - Quicker response = less clean up time and costs
 - May get insurance policy deductions
 - May not result in citation or other monetary penalties from resource impacts that could have been prevented



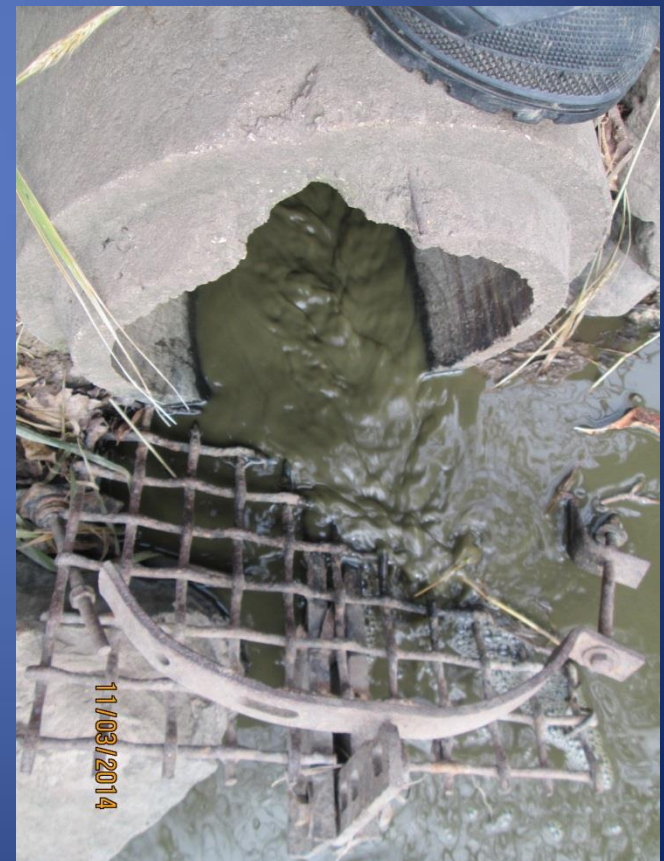






E. Coli bacteria levels were extremely high at the discharge pipe. 235/100 ml is the current threshold for declaring an advisory for beaches and we close a beach at 1000/100 ml. Bacteria count upstream was 33/100 ml, at the discharge pipe was 198,630/100 ml, and downstream was 2420/100 ml.

Ammonia nitrogen can be considered toxic to aquatic life when levels exceed 0.4 mg/l. Ammonia was 0.0662 mg/l at the upstream site, 139 mg/l at the discharge pipe, and 2.28 mg/l at the downstream site. The ammonia levels at the discharge pipe and at the downstream site are considered highly toxic to aquatic life.



Spill Requirements

- Stop
- Contain
- Report
- Clean-up
- Restore



Typical Plan Contents

- Phone list
 - Farm Contacts
 - Manure Hauler
 - Septic Pumper
 - Excavation Company
 - DNR
 - Town Chairperson
 - County LCD
 - Digger's Hotline
- Farm Address/Directions
- Steps for spill response
 - Eliminate Source
 - Contain / Recover
 - Contact appropriate agencies
 - Assess extent / Continue Clean-up
 - Make permanent repairs

What to do in Case of a Manure Spill

1. Eliminate the source.
 - Stop manure application or pumps.
 - Close valves.
 - Separate pipes, creating an air gap and stopping flow.
 - Transfer manure/liquid to another basin or lagoon.
2. Contain the spill, if possible.
 - Create a containment dam in the field, ditch or stream.
 - In a field, use tillage equipment to slow the flow.
 - Check for tile flows.
 - Construct a temporary holding basin down slope.
 - Ensure that you do not damage the embankment while creating a temporary basin.
 - If possible, place soil over the point of seepage, ensuring that you do not drive over or compact the seepage point.
3. Assess the extent of the spill and note any obvious damages.
 - Did the spill reach any surface waters, well casings or other sensitive areas?
 - How much was released?
 - What time?
 - Did any damage occur (employee injury, fish kills, or property damage)?
 - Can the spill reach streams?
4. Contact the appropriate agencies.
5. Clean up the spill and make repairs.
6. Prepare and submit summary.

Farm Information	
Farm Name:	
Address:	
City:	State: Zip:
Farm Owner:	
Phone:	Mobile Phone:
Directions to the farm (from crossroad or highway)	

Emergency Phone Numbers	
County Sheriff Dispatch:	dial 911
DNR 24-hour Spill Reporting Hotline	1-800-943-0003

County Land & Water Conservation Department	
County Conservationist	
Phone Number	
Department of Natural Resources	
Animal Waste Specialist	

Emergency Response Plan	
Farm Name:	
Owner/Operator:	Phone: Cell:
Owner/Operator:	Phone: Cell:
Farm Address:	
Farm Location: T N R E W Section:	County:
Driving Directions or Emergency Coordinates:	

In Case of Injury, Fire, or Rescue Emergency, Immediately Implement the Following:

1. Assess the condition of the victim, extent of the emergency (fire, rescue) and call for help.
2. Stabilize the victim, use on-site rescue equipment, evacuate buildings, or begin fire suppression as necessary.
3. Brief emergency responders upon arrival on current status of situation.

In Case of a Spill, Leak, or Failure at the Storage Facility, During Transport, or Land Application, Immediately Implement the Following:

1. Stop the source of the leak or spill. For example:
 - Turn off all pumps/valves and clamp hoses or park tractor on hoses to stop the flow of manure.
2. Assess the situation and make appropriate calls for people, equipment, and materials. (See contacts below)
 - Notify DNR spill hotline: 1-800-943-0003 (Spill reporting is mandatory by state law.)
 - Call sheriff's office if spilled on public roads or its right-of-ways for traffic control.
 - Clear the road and roadside of spilled material immediately.
3. Contain the spill and prevent spillage from entering surface waters, tile intakes, or waterways.
 - Use a skid loader or tractor with a blade to build dikes to contain or divert the spill or leak.
 - Insert sleeves around tile intakes (or plug/cap intakes) and block down slope culverts.
 - Use tillage implements to work up the ground ahead of the spill or use absorbent materials.
4. Begin cleanup.
 - Use pumps to recover liquids.
 - Land apply on approved cropland at appropriate rates.
5. Document your actions.

Emergency Contacts	Contact Person (or Company)	Phone Number
Fire/Rescue		911 or
County Sheriff		911 or
Farm Emergency Coordinator		
DNR Hazardous Spill Line		1-800-943-0003
DNR Permit Contact/Warden		
Veterinarian		
Equipment/Supplies	Contact Person (or Company)	Phone Number
On-Farm Equipment Operator		
Excavation Contractor		
Manure Hauler		
Septic Tank Pumping Truck		
Mortality Disposal Contractor		
Local Government Contacts	Contact Person	Phone Number
Town Chairman		
LCD County Conservationist		
NRCS District Conservationist		

Be prepared to provide the following information:

- Your name and contact information
- Farm address, location and other pertinent identification information.
- Nature of emergency (employee injury, fire, discharge of manure or hazardous materials).
- Emergency equipment and personnel that are needed.
- Potential for manure or hazardous materials to reach surface waters or major field drains.
- Current status of containment efforts.
- Location of hazardous/flammable materials, fire suppression equipment, emergency cut off switches or valves.

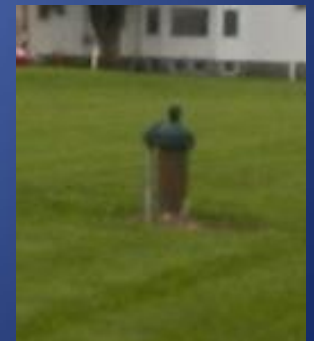
Plan recommendations

- Site diagram of farm
- List more than one contractor for response / research their availability
- List detailed response procedures broken down by type of spill
- NMP maps should be readily available - important for land application area runoff/spills



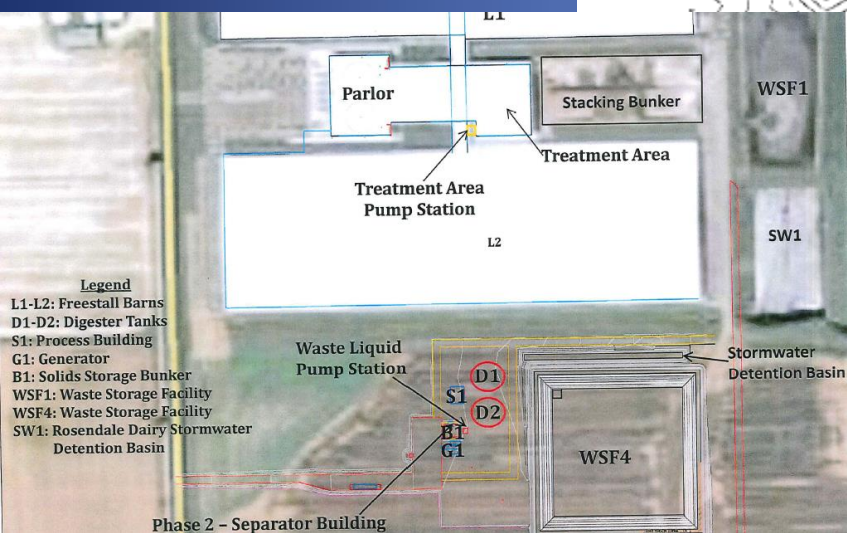
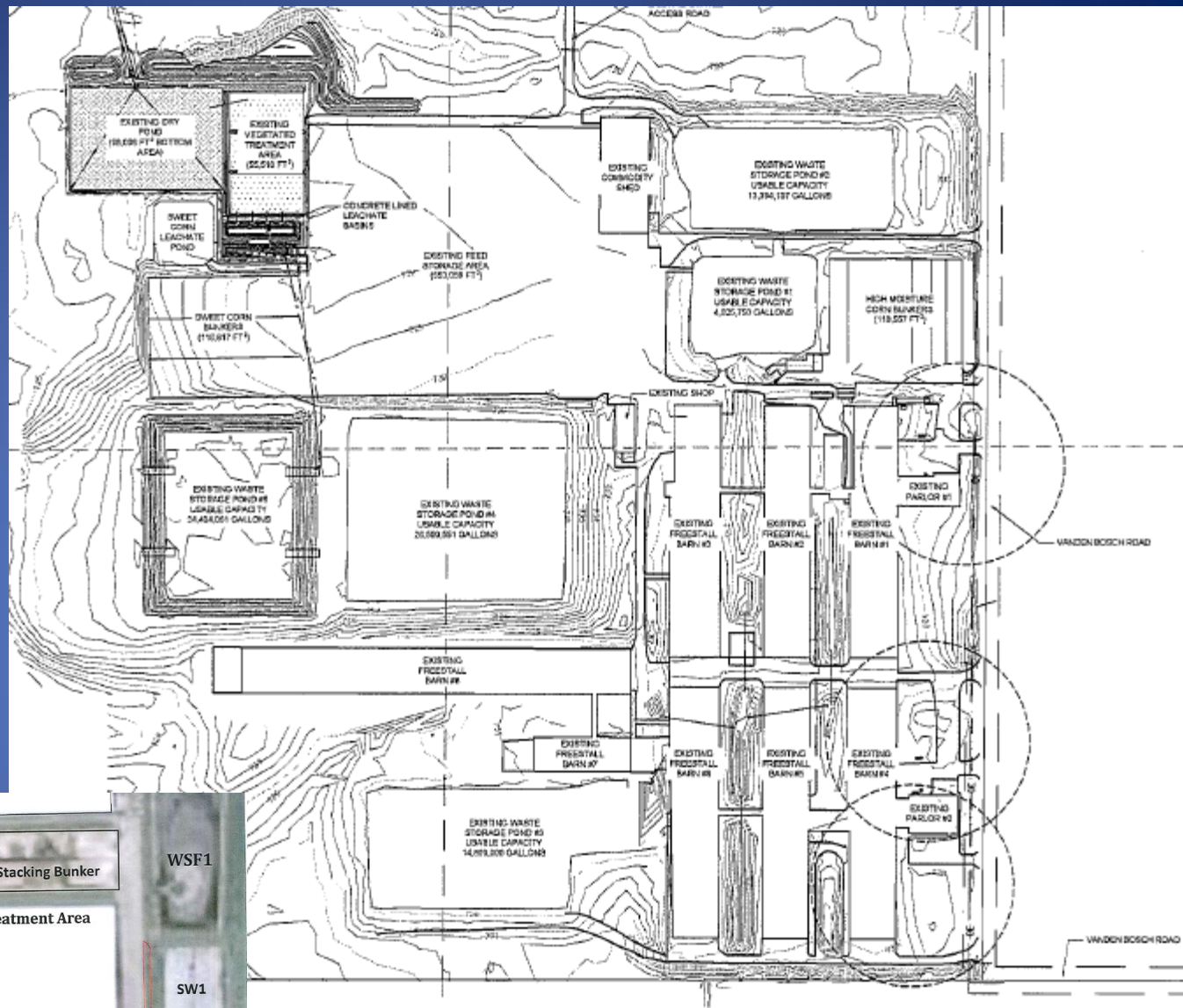
Site diagram of farm

- Location of tile lines and storm water drains
 - Inlet and outlet locations
 - Underground tile line locations and type
- Location of underground utilities
 - Manure / waste transfer lines
 - Water lines
 - Gas and electric, etc.
- Location of concentrated flow channels with flow directions
 - Ditches
 - Streams
- Location of wells



- Perforated drain tile
- Manhole storm drain
- Waste pumping stations
- Waste transfer pipe
- ➡ Overland flow direction





List more than one contractor for response / research availability...

- Septic companies
- Manure applicators
- Pumping equipment
- Excavating equipment
- Environmental consultants
- Engineering consultants
- Source for clean water for flushing/jetting
- Plow/implement equipment
- 24 hour availability?
- Holidays & Weekends?
- Response time?
- Services provided?

Procedures for response / Caution during application

Use Caution when Applying Manure Near Critical Sites Which Include:

- ♦ wells
- ♦ channels
- ♦ ditches
- ♦ waterways
- ♦ streams
- ♦ rivers
- ♦ lakes
- ♦ ponds
- ♦ tile inlets
- ♦ broken tile lines
- ♦ sinkholes
- ♦ bedrock near surface



If manure is running off the field while surface applying, STOP! Work manure into the soil immediately.

Lagoon or slurry basin overflow responses.

- Add clay-type soil temporarily to the berm, increasing the elevation
- Pump manure and wastewater to fields at an acceptable rate.
- Stop all additional flow to the storage structure.
- Call a pumping contractor
- Prevent any surface water from entering the storage structure.

Runoff from manure application field responses.

- Immediately stop application.
- Create a temporary diversion or berm to contain manure on the field.
- Incorporate manure, reducing further runoff.
- Evaluate and eliminate the situation that caused the runoff.
- Evaluate the application rates for the fields where runoff occurred.

What Happens When a Spill is Reported to the 24 hour Spill Hotline?

- Hotline Staff take down details (scripted questions)
- Regional Spill Coordinator or On-Call Duty Officer is immediately contacted by the staff at hotline.
- Based on the information provided the person contacted assesses the information/situation and determines the need for additional response and/or DNR presence.
- A summary email is sent by hotline staff with the initial information collected during the call. That email is sent to a predetermined distribution list of people specific to the location and type of spill.
- Spills program sends a “Responsible Party” letter to farm owner advising them of responsibilities for clean-up.

Reporting Reminders

- Responsible Party (farm owner) should be the one to report the spill if possible
- If manure applicator reports spill, the farm name responsible for the manure must be named
- Don't under report volumes or downplay impacts or risks of impacts to water quality
- Explain what measures have been taken and are planned to be taken
- It is beyond DNR staff's scope to provide prescriptive clean up methods

DNR spill response roles

- Receive notification of reportable spills
- Respond as necessary to ensure appropriate action is taken to clean up
- Determine that remedial clean-up activities are sufficient (restored to previous state as much as practicable)
- Take enforcement when necessary



On scene presence



- DNR Wardens
- DNR Agricultural Runoff Staff
- DNR Spills Coordinator
- DNR Water Biologists
- County Land Conservation
- County Health
- Media



CAFO Permit Requirements

- Compliance Schedule Timeline
 - 30 days to develop response plan
 - Often in nutrient management plans
- Spill Reporting / Permit Noncompliance
 - 24 hour notification
 - Call Spills Hotline
 - Call DNR permit contact
- Written Report Deadlines
 - CAFO Permit states 5 days (this can be extended based on circumstance)
 - Spills program is 45 days after spill
 - Include photos in report
- Other
 - Plans should be updated regularly
 - Staff training is recommended and leads to quicker response to minimize or prevent impacts

5.2.3 Emergency Response Plans

Within 30 days of the effective date of the permit, the permittee shall develop a written emergency response plan, or update an existing plan if necessary, in accordance with s. NR 243.13(6). The plan shall be made available to the Department upon request. The emergency response plan shall be reviewed and, if appropriate or necessary, amended whenever the operation undergoes significant expansions or other changes that affect the volume or location of potential unauthorized spills or discharges. The plan shall be amended as needed to reflect changes in available equipment, available clean-up contractors or procedures to address unauthorized spills or discharges, or amended in accordance with comments provided by the department. The plan shall be retained at the production area and the permittee shall notify all employees involved in manure and process wastewater handling of the location of the plan.

5.1.11 Spill Reporting

The permittee shall notify the Department in the event that a spill or accidental release of any material or substance results in the discharge of pollutants to the waters of the state at a rate or concentration greater than the effluent limitations or restrictions established in this permit, or the spill or accidental release of the material that is unregulated in this permit, unless the spill or release of pollutants has been reported to the Department in accordance with s. NR 205.07 (1)(s), Wis. Adm. Code, and the “Noncompliance - 24 Hour Reporting,” section of this permit.

NOTE: Section 292.11(2)(a), Wisconsin Statutes, requires any person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance to notify the Department of Natural Resources **immediately** of any discharge not authorized by the permit. The discharge of a hazardous substance that is not authorized by this permit or that violates this permit may be a hazardous substance spill. To report a hazardous substance spill, call DNR's 24-hour HOTLINE at **1-800-943-0003**.

5.1.15 Noncompliance - 24 Hour Reporting

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. This includes any upset which exceeds any effluent limitation in the permit, or violations of the discharge limitations listed in the permit.

Where the
clamp broke
that caused
manure to
spray
everywhere



New
barricade
installed
view from
inside



Manure flowing out
of pump room to
the east/south east

Pump room is to
the west



Manure pit # 1

Where slope
starts that leads
to culvert

Resources for developing a plan

- Consulting firms
- County Land Conservation Department templates
- DATCP template
- NRCS template
- Several examples online
- Look for DNR CAFO permittee template in 2015

Thank you for your attention

Any Questions?

